

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims, in accordance with the following:

1. (ORIGINAL) A servo controller for driving a servo motor on the basis of command positions input by a master control unit, comprising:

learning control means for creating correction data on the basis of a positional deviation in a same command pattern, storing said data in a memory, and correcting positional deviation; wherein said learning control means creates correction data on the basis of the positional deviation, and corrects the positional deviation, during the period from a learning control start command to a learning control end command.

2. (ORIGINAL) A servo controller for driving a servo motor on the basis of commands input by a master control unit, comprising:

learning control means which has a memory for storing correction data determined on the basis of a positional deviation between a command position input from the master control unit and a detected position of a drive object driven by the servo motor, and performs learning control by correcting the positional deviation on the basis of the correction data stored in said memory;

wherein said learning control means judges a learning control start command and a learning control end command input by the master control unit, and stores in said memory said correction data for each prescribed cycle in the driving operation of said servo motor during the period from said learning control start command to said learning control end command, and

performs learning control of the drive of said servo motor in the period from said learning control start command until said learning control end command, on the basis of positional commands input from said master control unit and the correction data for each of said prescribed cycles stored in said memory.

3. (CURRENTLY AMENDED) The servo controller according to claim 1 or claim 2, wherein said learning control means performs learning control from the time when the movement command, that is the differential of the positional commands, ceases to be 0, after

said learning start command, until the learning end command.

4. (CURRENTLY AMENDED) The servo controller according to ~~any one of claims 1 to 3~~ claim 1, wherein said learning control means comprises a plurality of memories corresponding respectively to a plurality of processing shapes, and in accordance with an identification code specifying said processing shape, a learning control start command and a learning control end command from said master control unit, learning control is performed from the learning control start command to the learning control end command, by selecting a memory by means of the identification code.

5. (CURRENTLY AMENDED) The servo controller according to claim 1 or ~~claim 2~~, wherein said memory is a non-volatile memory.

6. (CURRENTLY AMENDED) The servo controller according to claim 1 or ~~claim 2~~, correction data stored in said memory can be transferred to and from a storage device of said master control unit.

7. (CURRENTLY AMENDED) The servo controller according to claim 1 or ~~claim 2~~, wherein the correction data stored in said memory can be cleared by a command from said master control unit.

8. (CURRENTLY AMENDED) The servo controller according to claim 1 or ~~claim 2~~, wherein updating of the correction data alone can be halted by means of a command from said master control unit.

9. (CURRENTLY AMENDED) The servo controller according to claim 1 or ~~claim 2~~, wherein updating of the correction data is halted when said positional deviation has come within a prescribed range.

10. (CURRENTLY AMENDED) The servo controller according to claim 1 or ~~claim 2~~, wherein said master control unit is informed of the fact that said positional deviation has exceeded a predetermined value.

11. (CURRENTLY AMENDED) The servo controller according to claim 1 or ~~claim 2~~,

wherein it is judged that the motor capacity has been exceeded if the current command has exceeded a predetermine value, informing said master control unit of the fact.

12. (CURRENTLY AMENDED) The servo controller according to claim 1 or ~~claim 2~~, wherein said master control unit stores said correction data in association with an operating program specified by said learning control start command and said learning control end command, and transfers correction data corresponding to the set of a learning control start command and learning control end command output by the master control device, to said memory of the servo controller.

13. (CURRENTLY AMENDED) The servo controller according to claim 1 or ~~claim 2~~, wherein said master control unit stores said correction data in association with an operating program specified by means of said learning control start command and said learning control end command, and clears the correction data in said memory if there is no positional deviation data corresponding to the set of a learning control start command and learning control end command input from the master control device.

14. (CURRENTLY AMENDED) The servo controller according to claim 1 or claim 2, wherein said operating program is an NC program for processing a workpiece in a machine tool.

15. (CURRENTLY AMENDED) The servo controller according to claim 1 or ~~claim 2~~, wherein said master control unit previously interpolates positional command values for each axis and stores same in storing means, and outputs the positional command values stored in said storing means, to said servo controller.

16. (ORIGINAL) The servo controller according to claim 15, wherein said interpolation calculations are previously carried out by a computing device external to said master control unit, and said master control unit outputs said positional command values to said servo controller whilst receiving same from a communications device.